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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,941	07/21/2003	Michael R. Foster	DP-309380	6481

7590 08/25/2004

Jimmy L. Funke
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EXAMINER

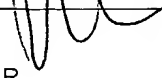
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ART UNIT PAPER NUMBER

3748

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/623,941	Applicant(s) FOSTER, MICHAEL R. 	
	Examiner Dien Tran	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 15 is objected to because on line 2, --at least one of-- should be inserted following “during”; and “and/or” should read --and--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-7, 11-13, 17, 18, 20-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Glugla et al. (US patent 6,389,806).

Regarding claims 1, 12, 17, 20-21, 23, 24, Glugla discloses an exhaust system for a vehicle having an internal combustion engine with a plurality of cylinders, comprising:

an exhaust manifold for providing fluid communication of exhaust of the plurality of cylinders to a catalytic converter, said exhaust manifold comprising a first exhaust pipe portion and a second exhaust pipe portion, said first exhaust pipe portion being in fluid communication with said second exhaust pipe portion and said second exhaust pipe portion being in fluid communication with said catalytic converter, said first and second exhaust pipe portion providing a first and second fluid path for exhaust of a first and second plurality of cylinders of the engine (see Figure 1); and a controller for

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determining whether to deactivate said first plurality of cylinders in accordance with a predetermined engine starting condition, wherein deactivation of said first plurality of cylinders causes said second plurality of cylinders to operate at a condition corresponding to an engine output demand (see col. 1, lines 62-67, col. 2, lines 1-2, col. 5, lines 15-23, col. 6, lines 39-48); wherein an exhaust of a first temperature is expelled by said second plurality of cylinders into said catalytic converter, said first temperature being greater than an exhaust temperature that would be generated by said first and said second plurality of cylinders operating at said condition corresponding to said engine output demand (see col. 5, lines 19-24); however, fails to disclose that said second fluid path is shorter than the first fluid path.

With regard to the limitation directed to the length of the second fluid path and first fluid path, it is the examiners position that the such would have been an obvious matter of design choice well within the level of ordinary skill in the art depending on the location of the engine, available spacing for each exhaust gas path, etc...Moreover, there is nothing in the record which establishes that the claimed ranges present a novel or unexpected result (see *In re Kuhle*, 526 F.2d 553, 188 USPQ 7(CCPA 1975)).

Regarding claim 2, Glugla further discloses that said first plurality of cylinders and said second plurality of cylinders are on opposite sides of the engine (see Figure 1).

Regarding claims 5-7, 11, 13, 18, Glugla further discloses that said controller receives input signals from a plurality of sensors in order to determine if the engine is being started in said predetermined engine starting condition which is a "cold start" of the engine (see col. 5, lines 15-23).

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Regarding claims 22, 25, Glugla further discloses activating said predetermined cylinders and deactivating the remaining cylinders when said catalytic converter has reached an effective operating temperature (see col. 7, lines 17-23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glugla et al. (US patent 6,389,806) in view of design choice.

Regarding claims 3, 4, Glugla discloses all the claimed limitations as discussed in claim 1 above, however, fails to disclose that said first plurality of cylinders and said second plurality of cylinders are on the same side of the engine.

With regard to the limitation directed to the position of the first and second group of cylinders, it is the examiners position that the such would have been an obvious matter of design choice well within the level of ordinary skill in the art depending on the preferred shape of the engine (V-shape or straight type engine), etc...Moreover, there is nothing in the record which establishes that the claimed ranges present a novel or unexpected result (see *In re Kuhle*, 526 F.2d 553, 188 USPQ 7(CCPA 1975)).

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Claims 8, 9, 10, 14-16, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glugla et al. (US patent 6,389,806) in view of Ma (US Patent 6,023,929).

Regarding claims 8, 14, 19, Glugla discloses all the claimed limitations as discussed in claims 1, 13, 18 above, however, fails to disclose that said controller deactivates said predetermined cylinders by closing intake and exhaust valves of said predetermined cylinders. Ma recognizes that prior art devices include deactivating the predetermined cylinders by deactivating both intake and exhaust valves (see col. 1, lines 29-32).

It would have been obvious for one having ordinary skill in the art, to utilize the teaching of Ma in the Glugla device, since the use thereof would have routinely in the prior art.

Regarding claims 9, 10, 15, 16, Glugla further discloses that air is periodically allowed into combustion chambers of said predetermined cylinders during operation of the engine (see col. 2, lines 6-12).

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (703) 308-6073. The examiner can normally be reached on Monday -Friday from 8:00 a.m.- 5:30p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax number for this group is (703) 872-9306.

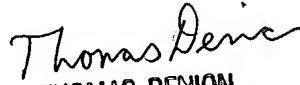
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



Diem Tran
Patent Examiner
Art unit 3748

DT
August 20, 2004



THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700